

Claim

Sandwich panel core being a 3-D structure from polymeric paper with binder applied onto its both sides is characterized by that it includes the perforated paper base whereof the binder layers thickness is decreased whereas the decrease value, the quantity of the perforated holes and their diameter satisfy the condition

$$n_h \cdot \frac{\pi \cdot d_h^2}{4} > \frac{2 \cdot \Delta_b \cdot F}{\delta_p \left(1 - \frac{\rho_p}{\rho_b}\right)}, \text{ where}$$

n_h is the quantity of holes,

d_h is the diameter of holes,

Δ_b is the binder layer thickness decrease,

F is the core surface area,

δ_p is the base layer thickness,

ρ_p is the paper base material density,

ρ_b is the binder density.